Abstract

A data switching engine is provided. The data switching engine includes a switching processor used for data traffic forwarding and an traffic management processor used for data traffic management. The switching processor retains all functionality of currently deployed data switching equipment as it relates to data switching and forwarding. The traffic management processor performs data traffic characterization, statistics extraction, service level agreement enforcement, etc. The use of the traffic management processor reduces computational loads otherwise imposed on the switching processor while maintaining or surpassing levels of service provided by currently deployed data switching equipment.